

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A method to facilitate debugging computer code
2 within an operating system kernel, comprising:
 - 3 receiving a source file containing a data structure definition, ~~wherein the~~ the
4 ~~data structure definition defines storage requirements for a data structure;~~
5 searching the source file for the data structure definition;
6 upon finding the data structure definition, saving the data structure
7 definition in a storage structure;
8 generating a new source code to display a data structure, wherein the new
9 source code is created using the data structure definition, wherein generating the
10 new source code includes generating source code to walk a linked list of data
11 structures;
12 compiling the new source code into an executable module;
13 installing the executable module into a modular debugger; and
14 during execution of the modular debugger, displaying a content of the data
15 structure to a user of the modular debugger using the executable module, whereby
16 the user is able to view the content of the data structure.

- 1 2. (Original) The method of claim 1, wherein receiving the source file
2 includes receiving a plurality of source files.

1 3. (Original) The method of claim 1, wherein the source file contains a
2 plurality of data structures.

1 4. (Original) The method of claim 3, wherein saving the data structure
2 definition in the storage structure includes saving the plurality of data structures in
3 the storage structure.

1 5. (Original) The method of claim 3, wherein generating the new source
2 code includes:

3 examining the plurality of data structures in the storage structure to locate
4 a cross-reference between data structures; and
5 generating the new source code for the plurality of data structures.

1 6 (Canceled).

1 7. (Currently amended) The method of ~~claim 6~~claim 1, wherein displaying
2 the content of the data structure includes displaying the content of the linked list
3 of data structures.

1 8. (Original) The method of claim 1, wherein the data structure definition
2 includes one of a tree, a linked list, a doubly linked list, and a queue.

1 9. (Currently amended) A computer-readable storage medium storing
2 instructions that when executed by a computer cause the computer to perform a
3 method to facilitate debugging computer code within an operating system kernel,
4 the method comprising:

5 receiving a source file containing a data structure definition, ~~wherein the~~
6 ~~data structure definition defines storage requirements for a data structure;~~

7 searching the source file for the data structure definition;
8 upon finding the data structure definition, saving the data structure
9 definition in a storage structure;
10 generating a new source code to display a data structure, wherein the new
11 source code is created using the data structure definition, wherein generating the
12 new source code includes generating source code to walk a linked list of data
13 structures;
14 compiling the new source code into an executable module;
15 installing the executable module into a modular debugger; and
16 during execution of the modular debugger, displaying a content of the data
17 structure to a user of the modular debugger using the executable module, whereby
18 the user is able to view the content of the data structure.

1 10. (Original) The computer-readable storage medium of claim 9, wherein
2 receiving the source file includes receiving a plurality of source files.

1 11. (Original) The computer-readable storage medium of claim 9, wherein
2 the source file contains a plurality of data structures.

1 12. (Original) The computer-readable storage medium of claim 11,
2 wherein saving the data structure definition in the storage structure includes
3 saving the plurality of data structures in the storage structure.

1 13. (Original) The computer-readable storage medium of claim 11,
2 wherein generating the new source code includes:
3 examining the plurality of data structures in the storage structure to locate
4 a cross-reference between data structures; and
5 generating the new source code for the plurality of data structures.

1 14 (Canceled).

1 15. (Currently amended) The computer-readable storage medium of claim
2 14, wherein displaying the content of the data structure includes displaying
3 the content of the linked list of data structures.

1 16. (Original) The computer-readable storage medium of claim 9, wherein
2 the data structure definition includes one of a tree, a linked list, a doubly linked
3 list, and a queue.

1 17. (Currently amended) An apparatus to facilitate debugging computer
2 code within an operating system kernel, comprising:

3 a receiving mechanism that is configured to receive a source file
4 containing a data structure definition, ~~wherein the data structure definition defines~~
5 ~~storage requirements for a data structure;~~

6 a search mechanism that is configured to search the source file for the data
7 structure definition;

8 a saving mechanism that is configured to save the data structure definition
9 in a storage structure;

10 a generating mechanism that is configured to generate a new source code
11 to display a data structure, wherein the new source code is created using the data
12 structure definition;

13 wherein the generating mechanism is further configured to generate source
14 code to walk a linked list of data structures;

15 a compiling mechanism that is configured to compile the new source code
16 into an executable module;

17 an installing mechanism that is configured to install the executable module
18 into a modular debugger; and

19 a displaying mechanism that is configured to display a content of the data
20 structure to a user of the modular debugger using the executable module, whereby
21 the user is able to view the content of the data structure.

1 18. (Original) The apparatus of claim 17, wherein the receiving
2 mechanism is further configured to receive a plurality of source files.

1 19. (Original) The apparatus of claim 17, wherein the search mechanism is
2 further configured to search the source file for a plurality of data structures.

1 20. (Original) The apparatus of claim 19, wherein the saving mechanism is
2 further configured to save the plurality of data structures in the storage structure.

1 21. (Original) The apparatus of claim 19, further comprising:
2 an examining mechanism that is configured to examine the plurality of
3 data structures in the storage structure to locate a cross-reference between data
4 structures; and
5 wherein the generating mechanism is further configured to generate the
6 new source code for the plurality of data structures.

1 22 (Canceled).

1 23. (Currently amended) The apparatus of claim 22, wherein the
2 displaying mechanism is further configured to display the content of the linked list
3 of data structures.

1 24. (Original) The apparatus of claim 17, wherein the data structure
2 definition includes one of a tree, a linked list, a doubly linked list, and a queue.